CURRENT AMENDED CLAIM

1	1. (Previously presented) A method for using empirical measurements of
2	accesses to synchronization points within an application to construct a
3	performance model for the application, comprising:
4	modifying the application to record statistics related to the synchronization
5	points within the application, wherein the statistics include a directed call graph
6	specifying an ordering of function calls;
7	running the application to produce the statistics related to synchronization
8	points;
9	constructing the performance model based upon the statistics, wherein the
10	performance model is a queuing system model in which synchronization points in
11	the application are represented by service centers in the queuing system model,
12	wherein constructing the performance model involves constructing a queuing
13	model, wherein each synchronization point is a service center for jobs
14	representing processes that circulate between service centers in a manner
15	specified by the directed call graph; and
16	using the performance model to predict a performance of the application.